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Savannah River Archaeological Research

Mississippian Period Research at the Savannah River Site

By Adam King and Keith Stephenson

Introduction

Although archaeological research has been conducted at the Savannah River Site (SRS) by the SC Institute of Archaeology and Anthropology for over 25 years, only a small portion of that work has focused on understanding the Mississippian period occupation of the facility and the middle Savannah River valley. In 1998, we began a research project designed to address that deficiency. Our goals are to better understand the dating and function of Mississippian period sites on the SRS and to explore changes in the Mississippian settlement system through time.

Defining Mississippian

The term Mississippian has several different meanings. It refers to a time period in prehistory that lasted from about AD 1000 to 1600, although in different regions, the Mississippian period may have been somewhat longer or shorter. Mississippian also refers to a past way of life or cultural adaptation that was distributed across the Midwest and Southeast. Mississippian people cultivated corn, beans, squash, and other plants in small gardens, hunted wild game such as deer and turkeys, and collected fish, shell fish, and turtles from rivers and lakes. Being mainly farmers, they often lived close to rivers whose periodic flooding replenished soil nutrients and kept their gardens productive. Mississippian people lived in small villages and hamlets that rarely had more than a few hundred residents, and in

some areas also lived scattered in single-family farms across the landscape.

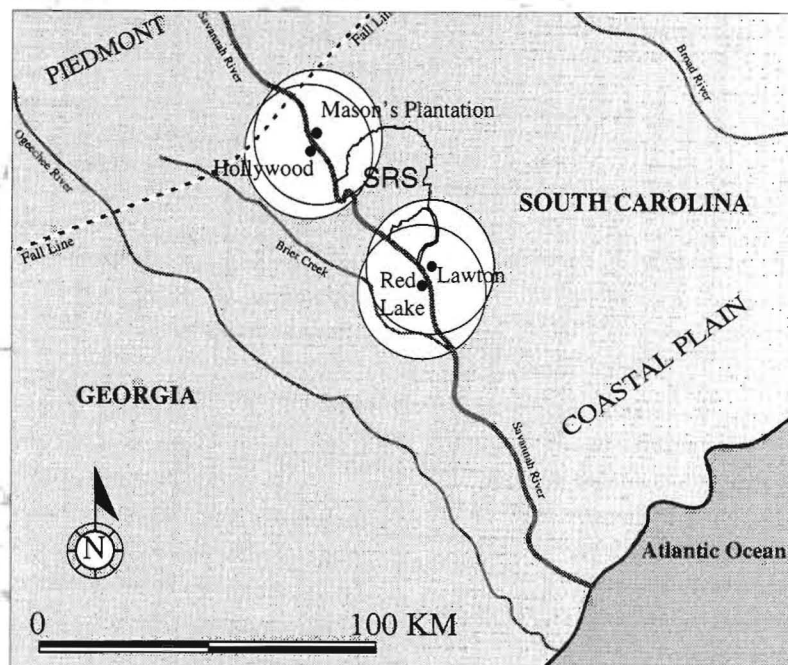
Mississippian was more than just an economic adaptation to the landscape—it was also a social structure. Mississippian people were organized as chiefdoms. Chiefdoms are multiple community social and political units that have social ranking as a fundamental part of their structure (Service 1962). In ranked societies, people belong to one of two groupings, elites and commoners. Elites, who make up a relatively small percentage of chiefdom populations, are believed to be more important than commoners. This difference is based more in belief than in such things as wealth or military power. For example, the Natchez of Louisiana, who were still organized as a chiefdom during the early 1700s, believed that their chief and his immediate family were actually descended from the sun, an important god in the Natchez religion (Hudson 1976). It was believed that the Natchez chief, probably like most Mississippian chiefs, could affect the supernatural world and therefore had the ability to ensure that important events like the sunrise, spring rains, and the fall harvest came as scheduled. Because of these supernatural connections, elites received special treatment such as larger houses, special clothing and food, and exemption from many of life's hard labors like food production. Commoners, who made up the bulk of chiefdoms, were the everyday producers of the society, growing food, making crafts, serving as

warriors, and as labor for public works projects.

Mississippian societies had one very distinctive material culture marker—earthen platform mounds. Although some large platform mounds were built during the Woodland period (Pluckhahn 1996), most were constructed and used during the Mississippian period. Both archaeological evidence and historic information indicate that Mississippian platform mounds were used as substructures for the houses of chiefs and temples dedicated to the chiefly ancestors, and in many cases as final resting places for the bones of dead elites (DePratter 1991; Hally 1996). Mounds seem to be so closely associated with Mississippian chiefs that it is safe to assume that where there is a platform mound, a chief once lived (Hally 1993). Since chiefs were the political and social leaders of Mississippian chiefdoms, the home of a chief also served as the political capital of his polity or chiefdom.

Using this information, Hally (1993) has constructed an idealized model of the settlement system of a Mississippian chiefdom. According to this model, commoner populations will be scattered in villages, hamlets, and farmsteads across an area no greater than 20 km and generally on the order of 10 to 15 km from the mound town political capital. Hally's (1993) research suggests that most Mississippian chiefs could not administer an area greater than 20 km from their capital. Areas at greater distances than 20 km from a capital would be used as hunting

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Location of Mississippian mounds in the SRS vicinity. (SCIAA drawing)

reserves and collecting areas and ultimately will serve as buffer zones between individual chiefdoms. If neighboring chiefdoms were not on friendly terms, then the buffer zones between them may have been dangerous places to live.

The State of Middle Savannah Mississippian Knowledge

Thanks in large part to the work of Anderson (1994), a considerable amount is known about the general Mississippian adaptation in the Savannah River valley, and how those Mississippian societies changed through time. While a significant amount of work has been done in the Piedmont portions of the valley, the Mississippian period record in the Coastal Plain, and the Aiken Plateau in particular, has not been investigated very intensively (Sassaman et al. 1990). With the exception of some testing conducted at local mound centers near the end of the 19th century (Moore 1898; Thomas 1894) and more recently (DeBaillou 1965, Cook 1980), most of the archaeology

conducted on Mississippian period sites in the middle Savannah River valley has consisted of site discovery surveys and some very limited testing conducted on the SRS (Anderson 1994; Cabak et al. 1996; Sassaman et al. 1990). As a result, comparatively little is known about the SRS Mississippian sites and how they may have been integrated into local chiefdoms.

Before we can begin to address some of the larger issues at hand, we must be able to date sites and recognize differences in time. Working with Mississippian period sites, this is usually done by examining differences in the form and decoration of pottery vessels. Using existing pottery collections, Anderson (1994) has constructed a provisional pottery phase sequence for the middle Savannah River valley (Table 1) that divides the Mississippian period into three phases. Of these phases, only the Hollywood phase was defined using large collections recovered from well controlled contexts (DeBaillou 1965; Hally and Rudolph 1986). Definitions of the

Lawton and Silver Bluff phases are based on the examination of existing small collections, but also draw heavily on regional trends in ceramic assemblage composition and change over time. Larger pottery collections are needed from controlled excavation contexts to more clearly define these phases. Also, the dating of these phases must be more firmly established. The dating of the middle Savannah sequence proposed by Anderson (1994) draws on pottery sequences anchored by radiocarbon dates in other regions of Georgia and South Carolina. In order to refine the work of Anderson, radiocarbon dates from middle Savannah River valley contexts also are needed.

Table 1. Mississippian Phase Sequence for the Middle Savannah Valley

Early Mississippian, Lawton,
(1100-1250)

Middle Mississippian, Hollywood,
(1250-1350)

Late Mississippian, Silver Bluff,
(1350-1450)

Late Mississippian, Unoccupied,
(1450-1600)

In addition to improving our control of time, it also will be important to improve our understanding of how SRS Mississippian sites were used. Currently, no mound sites are known to exist on the SRS, although the possibility exists that some did in the past but have been destroyed by erosion or modern activities. Two mound sites have been recorded to the north of the SRS and another two are known to the south of the facility, which were abandoned by ca. 1450. If we

impose Hally's model of chiefdom settlement over the SRS region, we see that most of the Mississippian sites on the SRS fall in what may have been a buffer zone between chiefdoms. The chiefdom settlement model predicts that those sites should be hunting camps and other extraction sites and not permanent habitation sites. Using the distribution of Mississippian period pottery and projectile points on the SRS, both Cabak et al. (1996) and Sassaman et al. (1990) have hypothesized that Mississippian people used the SRS in much the same way as their Woodland predecessors. Available evidence indicates that the upland areas of the SRS were used on a year-round basis by family groups during the Woodland period. Whether the SRS Mississippian sites represent permanent habitations or short-term activity loci remains to be determined by archaeological investigations.

Should some of the Mississippian sites on the SRS be permanent habitations, then their distribution with respect to contemporary mound centers will have important implications for understanding the structure of local chiefdoms. Particularly, habitation sites located at distances greater than 20 km from a contemporary mound site may suggest that the chiefdoms of the middle Savannah River valley, at least during certain phases, were more loosely integrated than current models might predict. Similarly, alternating phases of clustering and dispersal of upland habitations should reflect the impacts of larger political processes on local producers. In order to explore these possibilities, we also need to

locate and date the occupation of all Mississippian mound centers in close proximity to the SRS.

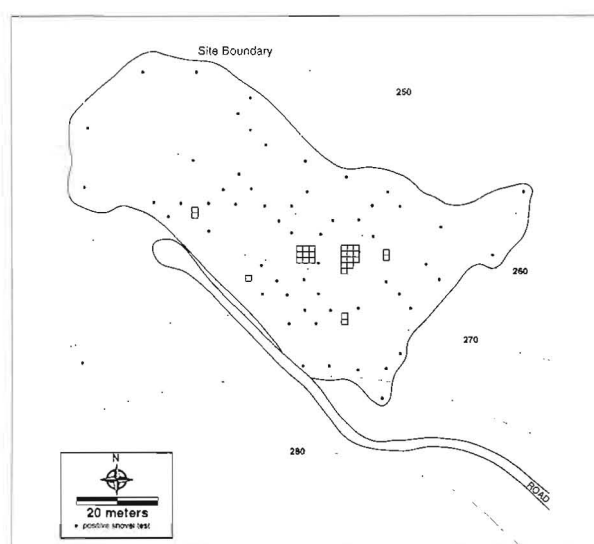
Determining the Function of Mississippian Sites

While progress has been made on several of the fronts mentioned above, in this article we will discuss our efforts to understand the function of Mississippian period sites on the SRS. Since initiating this research project, two Mississippian period sites have been investigated fairly intensively. As our analysis has been completed on only one, we will focus on it. 38AK757 was located by staff of the Savannah River Archaeological Research Program (SRARP) during a routine cultural resources survey in preparation for the construction of the proposed Surplus Plutonium Disposition Facility (King and Stephenson 2000). The site measures .55 ha (1.36 ac) and is located on a gently sloping ridge above a small tributary of Upper Three Runs Creek. Upper Three Runs is one of several large streams draining the uplands of the Aiken Plateau on the SRS.

Once located, the site was

systematically shovel tested at 10 m intervals, resulting in the excavation of 64 positive shovel test pits (See plan map). Diagnostic materials recovered indicate that the site was occupied during the Early Archaic, Late Archaic, Woodland, and Mississippian periods. Based on the density of artifacts recovered in the shovel tests, locations were chosen for the excavation of four 1 x 2 m test units and a single 1 x 1 m test unit. Two of the 1 x 2 m test units were ultimately expanded into small blocks encompassing a total of 21 sq m. The Mississippian period artifacts recovered during these excavations included pottery, projectile points, flake tools, hammer stones, and flaking debris. Although the Mississippian pottery collection is small (n=52), the presence of a segmented rim strip on one sherd, a row of punctated nodes on another, and the occurrence of the Filfol Scroll complicated stamped motif suggest a Silver Bluff (AD 1350-1450) phase assignment for the site. No organic material was recovered that is suitable for obtaining a radiocarbon date for the site.

Rather than being continuously scattered across the site, the Mississippian artifacts at 38AK757 appear



Plan map of excavations at 38AK757. (SCIAA drawing)

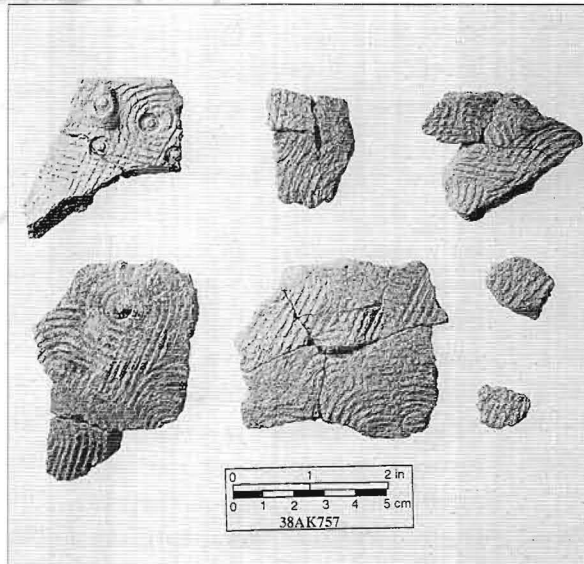
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to be clustered in particular areas. In five instances, concentrations of artifacts encountered contained some combination of higher than average debitage counts, broken bifaces, cobble tools, flake tools, and partially reconstructable pottery vessels. It is unclear whether these concentrations represent the in situ remains of activity areas or redeposited refuse from activities conducted elsewhere at the site. Regardless, they indicate that a wide variety of activities took place at the site. The presence of debitage, bifaces, and hammer stones indicates that these activities included stone tool production and maintenance, while the recovery of utilized flakes is suggestive of activities related to the processing of non-lithic materials. As both bowl and jar forms were represented in the pottery assemblage, presumably both food cooking and storage also took place at the site.

Sassaman (1993) recovered a similar array of artifacts from 38AK157, where intensive excavations revealed a habitation site dating to the Late Archaic and Early Woodland periods. The size distribution of whole flakes recovered at 38AK757 conforms to Sassaman's (1990) expectations for a habitation site whose inhabitants applied a non-quarry lithic procurement strategy. The available evidence, then, points to the possibility that 38AK757 was used as a habitation site, and this is consistent with recent interpretations of the SRS Mississippian settlement system derived from site location alone (Cabak et al. 1996; Sassaman et al. 1990). Future large-scale excavations at the site, hopefully mandated by the construction of new Depart-

ment of Energy facilities, should confirm the validity of this interpretation.

Although 38AK757 is more than 20 km away from all known mound centers in the vicinity of the SRS, its identification as a habitation site does



Mississippian pottery from 38AK757. (SCIAA photo)

not necessarily call into question Hally's model of chiefdom settlement. Currently, no mound centers in the area are known to have a Silver Bluff phase component, but it remains possible that an as yet unrecorded mound site dating to that phase exists. According to Anderson's (1994) work, the lower portion of the Savannah River valley was abandoned after the Silver Bluff phase, at least in part because of several years of lower than average rainfall. It is possible that the disintegration of chiefdoms began during the Silver Bluff phase, creating a settlement system that can be expected to differ from Hally's chiefdom model. Only future work on and off of the SRS will help resolve these questions

Continuing Mississippian Research

Once analyzed, the information recovered from a second SRS Mississippian site (38AK753) should add to our understanding of the function of such sites.

Fortunately, 38AK753 dates to the Lawton phase (AD1100-1250), and will therefore add information about how earlier Mississippian sites may have been used. If the Department of Energy's Surplus Plutonium Disposition Facility goes forward in its current form, it may create the need to excavate two more probable Lawton phase sites, adding a great deal to our efforts to identify different functional types of Mississippian sites. Outside of these intensive excavations, SRARP staff also have initiated an effort to intensively shovel test a sample of Mississippian

sites located in a variety of environmental settings on the SRS. The intent is to collect pottery and other artifact samples from a variety of sites. By combining large-scale excavation data with information collected from intensive shovel testing, we hope to identify temporally and functionally diagnostic artifact sets that can be used to map out changes in Mississippian settlement over time.

In addition to our efforts to understand the function of SRS Mississippian sites, work continues on firmly defining and dating the Mississippian pottery sequence for the middle Savannah River valley. Several large pottery collections have been examined already, and we have initiated a project to reexamine all

Mississippian pottery recovered on the SRS. Thanks to generous funding from the Archaeological Research Trust and the Savannah River Archaeological Research Program, four radiocarbon dates have been obtained and more will be run in the near future.

References Cited

Anderson, D. G.

1994 *The Savannah River Chiefdoms: Political Change in the Late Prehistoric Southeast*. University of Alabama Press, Tuscaloosa.

Anderson, D. G., D. J. Hally, and J. L. Rudolph

1986 The Mississippian Occupation of the Savannah River Valley. *Southeastern Archaeology* 5(1):32-51.

Cabak, M. A., K. E. Sassaman, and J. C. Gillam

1996 *Distributional Archaeology in the Aiken Plateau: Intensive Survey of E Area, Savannah River Site, Aiken County, South Carolina*. Savannah River Archaeological Research Papers 8.

Cook, F.

1980 *Investigations at the Red Lake Site, Screven County, Georgia*. Unpublished manuscript.

DeBaillou, C.

1965 Test Excavations of the Hollywood Mound (9RI1), Georgia. *Southern Indian Studies* 17:3-11.

DePratter, C. B.

1991 *Late Prehistoric and Early Historic Chiefdoms in the Southeastern United States*. Garland Publishing, Inc., New York.

Hally, D. J.

1993 The Territorial Size of Mississippian Chiefdoms. In

Archaeology of Eastern North America, Papers in Honor of Stephen Williams, ed. by J. B. Stoltman, pp. 143-168. Archaeological Report No. 25, Mississippi Department of Archives and History, Jackson.

1996 Platform Mound Construction and the Instability of Mississippian Chiefdoms. In *Political Structure and Change in the Prehistoric Southeastern United States*, edited by J. F. Scarry, pp. 92-127. University of Florida Press, Gainesville.

Hally, D. J., and J. L. Rudolph

1986 *Mississippi Period Archaeology of the Georgia Piedmont*. Report No. 24. University of Georgia, Laboratory of Archaeology, Athens.

Hudson, C. M.

1976 *The Southeastern Indians*. University of Tennessee Press, Knoxville.

King, A. and D. K. Stephenson

2000 *Archaeological Survey and Testing of the Surplus Plutonium Disposition Facilities*. Savannah River Archaeological Research Program, South Carolina Institute of Archaeology and Anthropology, University of South Carolina. Technical Report Series Number 24.

Moore, C. B.

1898 Certain Aboriginal Mounds of the Savannah River. *Journal of the Academy of Natural Sciences of Philadelphia*, No. 2 (2nd Series):162-172.

Pluckhahn, T. J.

1996 Joseph Caldwell's Summerour Mound (9FO16) and Woodland Platform Mounds in the Southeastern United States. *Southeastern Archaeology* 15(2):191-211.

Sassaman, K. E.

1990 *Archaeological Testing at 38AK157, Savannah River Site, Aiken County, South Carolina*. Report submitted to the Savannah River Operations Office, United States Department of Energy. Manuscript on file, Savannah River Archaeological Research Program, South Carolina Institute of Archaeology and Anthropology, University of South Carolina.

1993 *Early Woodland Settlement in the Aiken Plateau: Archaeological Investigations at 38AK157, Savannah River Site, Aiken County, South Carolina*. Report submitted to the Savannah River Operations Office, United States Department of Energy. Manuscript on file, Savannah River Archaeological Research Program, South Carolina Institute of Archaeology and Anthropology, University of South Carolina.

Sassaman, K. E., M. J. Brooks, G. T. Hanson, and D. G. Anderson

1990 *Native American Prehistory and History in the Middle Savannah River Valley: Synthesis of Archaeological Investigations on the Savannah River Site, Aiken and Barnwell Counties, South Carolina*. Savannah River Archaeological Research Papers 1. Savannah River Archaeological Research Program, South Carolina Institute of Archaeology and Anthropology, University of South Carolina.

Service, E. R.

1962 *Primitive Social Organization: An Evolutionary Perspective*. Random House, New York.

Thomas, C.

1894 *Report on the Mound Explorations of the Bureau of Ethnology*. Smithsonian Institution, Bureau of Ethnology, Twelfth Annual Report. Washington, D.C.